



Maryland Weekly Influenza Surveillance Activity Report

A summary of influenza surveillance indicators reported to DHMH for the week ending April 30, 2016

Prepared by the Infectious Disease Epidemiology and Outbreak Response Bureau
Prevention and Health Promotion Administration
Maryland Department of Health and Mental Hygiene

The data presented in this document are provisional and subject to change as additional reports are received.

SUMMARY

During the week ending April 30, 2016, influenza-like illness (ILI) intensity in Maryland was **MINIMAL** and there was **LOCAL** geographic spread. There was a decrease in the proportion of outpatient visits for ILI reported by Sentinel Providers, while the proportion reported by Maryland Emergency Departments was unchanged. The proportion of MRITS respondents reporting ILI increased. The proportion of specimens testing positive for influenza at clinical laboratories increased slightly, with a substantial jump in the proportion of specimens testing positive for influenza type B. There was a decrease in the number of specimens testing positive for influenza at the DHMH lab, but the percent of specimens testing positive remained similar to last week. There were 38 influenza-associated hospitalizations reported. One influenza outbreak was reported. Nationally, influenza activity continued to decline.

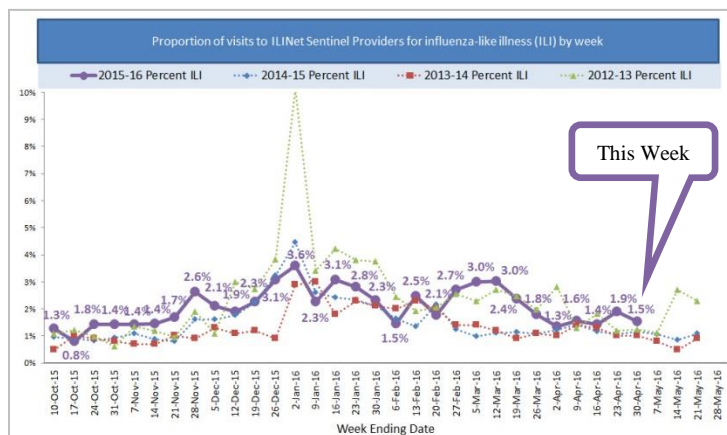
[Click here to visit our influenza surveillance web page](#)

ILI Intensity Levels
✓ Minimal
Low
Moderate
High

Influenza Geographic Spread
No Activity
Sporadic
✓ Local
Regional
Widespread

ILINet Sentinel Providers

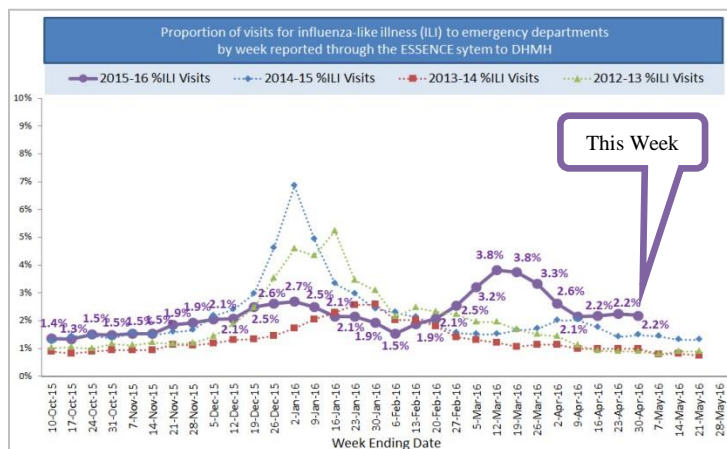
Twenty-four sentinel providers reported a total of 8,096 visits this week. Of those, 125 (1.5%) were visits for ILI. This is below the Maryland baseline of 1.8%.



ILI Visits To Sentinel Providers By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	30 (24%)	38 (24%)	1108 (24%)
Age 5-24	45 (36%)	68 (43%)	1659 (37%)
Age 25-49	23 (18%)	30 (19%)	991 (22%)
Age 50-64	17 (14%)	13 (8%)	537 (12%)
Age ≥ 65	10 (8%)	11 (7%)	231 (5%)
Total	125 (100%)	160 (100%)	4526 (100%)

Visits to Emergency Departments for ILI

Emergency Departments in Maryland reported a total of 48,991 visits this week through the [ESSENCE surveillance system](#). Of those, 1,069 (2.2%) were visits for ILI.



ILI Visits To Emergency Departments By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	238 (22%)	256 (23%)	8999 (28%)
Age 5-24	368 (34%)	409 (36%)	9721 (30%)
Age 25-49	285 (27%)	273 (24%)	8421 (26%)
Age 50-64	105 (10%)	118 (11%)	3310 (10%)
Age ≥ 65	73 (7%)	66 (6%)	1909 (6%)
Unknown	--	--	--
Total	1069 (100%)	1122 (100%)	32360 (100%)

Neighboring states' influenza information:

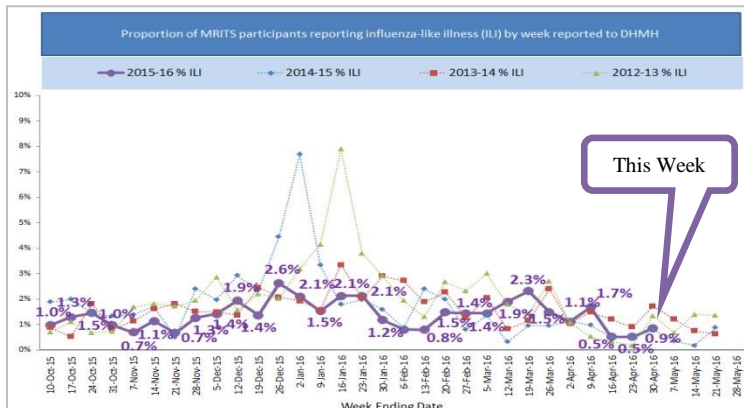
Delaware <http://dhss.delaware.gov/dph/epi/influenzahome.html>
District of Columbia <http://doh.dc.gov/service/influenza>
Pennsylvania [http://www.portal.state.pa.us/portal/server.pt/community/influenza_\(flu\)/14161](http://www.portal.state.pa.us/portal/server.pt/community/influenza_(flu)/14161)
Virginia <http://www.vdh.state.va.us/Epidemiology/flu/>
West Virginia <http://dhhr.wv.gov/oeps/disease/flu/Pages/fluSurveillance.aspx>

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Community-based Influenza Surveillance (MRITS)

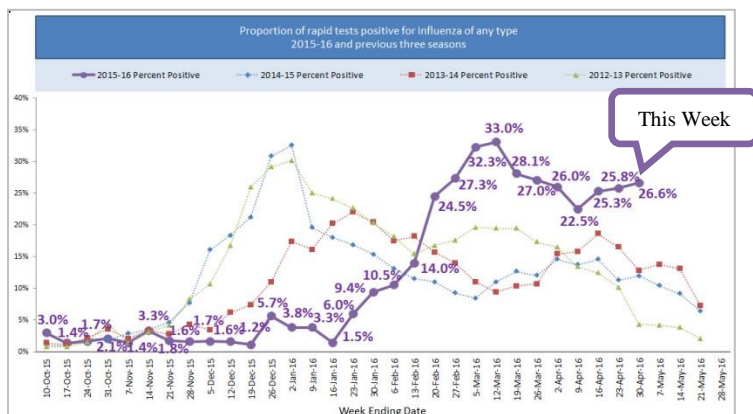
MRITS is the Maryland Resident Influenza Tracking System, a weekly survey for influenza-like illness (ILI). A total of 584 residents responded to the [MRITS survey](#) this week. Of those, 5 (0.9%) reported having ILI and missing a cumulative 13 days of regular daily activities.



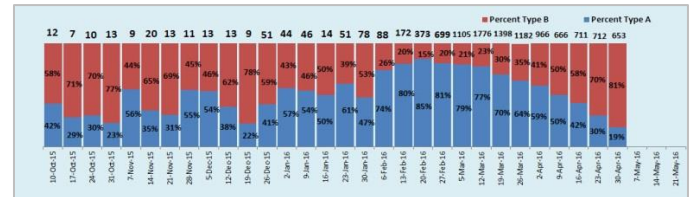
MRITS Respondents Reporting ILI By Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	--	--	14 (6%)
Age 5-24	1 (20%)	--	55 (22%)
Age 25-49	2 (40%)	2 (67%)	72 (28%)
Age 50-64	2 (40%)	1 (33%)	80 (32%)
Age ≥ 65	--	--	32 (13%)
Total	5 (100%)	3 (100%)	253 (100%)

Clinical Laboratory Influenza Testing

Forty clinical laboratories reported performing 2,453 influenza diagnostic tests, mostly rapid influenza diagnostic tests (RIDTs). Of those, 653 (26.6%) were positive for influenza. Of those testing positive, 124 (19.0%) were influenza type A and 529 (81.0%) were influenza type B. The [reliability of RIDTs](#) depends largely on the conditions under which they are used. False-positive (and true-negative) results are more likely to occur when the disease prevalence in the community is low, which is generally at the beginning and end of the influenza season and during the summer.

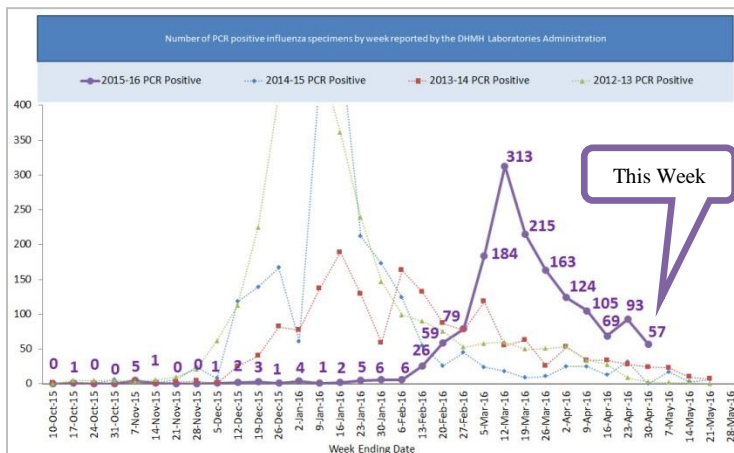


Positive Rapid Flu Tests by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A	124 (19%)	215 (30%)	6793 (62%)
Type B	529 (81%)	497 (70%)	4112 (38%)
Total	653 (100%)	712 (100%)	10905 (100%)



State Laboratories Administration Influenza Testing

The DHMH Laboratories Administration performed a total of 108 PCR tests for influenza and 57 (52.8%) specimens tested positive for influenza. Of those testing positive, 15 (26.3%) were type A (H1), 3 (5.3%) were type A (H3), 26 (45.6%) were type B (Yamagata), and 13 (22.8%) were type B (Victoria). PCR testing is more reliable than RIDT. The DHMH testing identifies subtypes of influenza A and lineages of influenza B, information that is not available from the RIDT testing. The lab performs genetic sequencing for a subset of the specimens they receive and can detect genes associated with antiviral resistance within those sequences.



Positive PCR Tests by Type (Subtype)	This Week Number (%)	Last Week Number (%)	Season Number (%)
Type A (H1)	15 (26%)	50 (54%)	1160 (76%)
Type A (H3)	3 (5%)	3 (3%)	45 (3%)
Type B (Victoria)	13 (23%)	17 (18%)	133 (9%)
Type B (Yamagata)	26 (46%)	23 (25%)	186 (12%)
Dual - Type A(H3) / B (Yamagata)	--	--	1 (<1%)
Total	57 (100%)	93 (100%)	1525 (100%)

Gene Mutation Associated w/Antiviral Resistance	This Week Number (%)	Last Week Number (%)	Season Number (%)
Detected	--	--	1 (<1%)
Not Detected	--	--	263 (100%)
Total	--	--	264 (100%)

Where to get an influenza vaccination

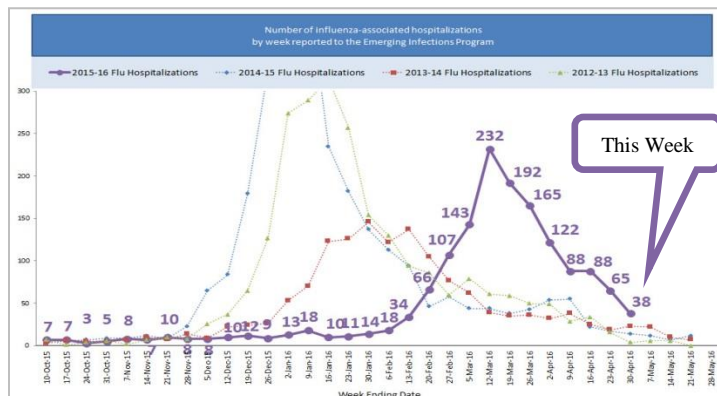
Interested in getting a flu vaccine for the 2015-16 influenza season? Go to <http://dhhm.maryland.gov/flumid/Pages/getvaccinated.aspx> and click on your county/city of residence. You will be redirected to your local health department website for local information on where to get your flu vaccine.

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Influenza-associated Hospitalizations

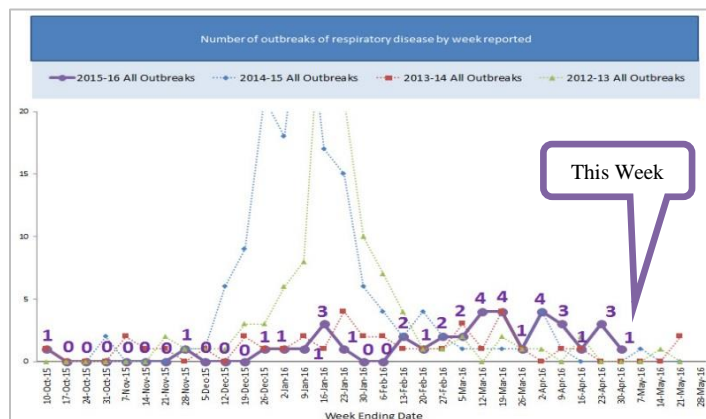
There were 38 influenza-associated hospitalizations reported to DHMH this week. (A person with an overnight hospital stay along with a positive influenza test of any kind, e.g. RIDT or PCR, is considered an “influenza-associated hospitalization” for purposes of influenza surveillance.)



Influenza-Associated Hospitalizations by Age Group	This Week Number (%)	Last Week Number (%)	Season Number (%)
Age 0-4	2 (5%)	4 (6%)	146 (10%)
Age 5-17	2 (5%)	5 (8%)	89 (6%)
Age 18-24	3 (8%)	3 (5%)	51 (3%)
Age 25-49	7 (18%)	12 (18%)	330 (22%)
Age 50-64	6 (16%)	21 (32%)	437 (29%)
Age ≥ 65	18 (47%)	20 (31%)	465 (31%)
Total	38 (100%)	65 (100%)	1518 (100%)

Outbreaks of Respiratory Disease

There was 1 influenza outbreak reported to DHMH this week. (Disease outbreaks of any kind are reportable in Maryland. Respiratory outbreaks may be reclassified once a causative agent is detected, e.g. from ILI to influenza.)



Respiratory Outbreaks by Type	This Week Number (%)	Last Week Number (%)	Season Number (%)
Influenza	1 (100%)	2 (67%)	16 (43%)
Influenza-like Illness	--	1 (33%)	8 (22%)
Pneumonia	--	--	13 (35%)
Other Respiratory	--	--	--
Total	1 (100%)	3 (100%)	37 (100%)

National Influenza Surveillance (CDC)

During week 17 (April 24-30, 2016), influenza activity decreased in the United States.

- Viral Surveillance:** The most frequently identified influenza virus type reported by public health laboratories during week 17 was influenza B. The percentage of respiratory specimens testing positive for influenza in clinical laboratories decreased.
- Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below their system-specific epidemic threshold in both the NCHS Mortality Surveillance System and the 122 Cities Mortality Reporting System.
- Influenza-associated Pediatric Deaths:** Four influenza-associated pediatric deaths were reported.
- Influenza-associated Hospitalizations:** A cumulative rate for the season of 30.6 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.
- Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.8%, which is below the national baseline of 2.1%. Three of 10 regions reported ILI at or above region-specific baseline levels. Puerto Rico and two states experienced moderate ILI activity; three states experienced low ILI activity; New York City and 45 states experienced minimal ILI activity; and the District of Columbia had insufficient data.
- Geographic Spread of Influenza:** The geographic spread of influenza in Guam, Puerto Rico, and 7 states was reported as widespread; 15 states reported regional activity; the District of Columbia and 17 states reported local activity; and the U.S. Virgin Islands and 11 states reported sporadic activity.

